

California Title 24 - 2008

Residential Lighting

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Issues Being Evaluated

- Availability of Title 24 compliant residential lighting
 - IC/AT downlights
 - Sloped ceiling downlights
 - Attractive residential lighting
- Ability to identify Title 24 compliant residential lighting

Availability of T24 Downlights

- Downlights
 - Background on development
 - Focus on energy efficiency and reliable product
 - PIER project – CA Kitchen Downlight
 - Electronic ballasts: no flicker, instant on
 - Thermally enhanced performance – 5 year ballast warranty
 - Good color
 - Contractor friendly installation
 - Manufacturer commitment to:
 - Product development
 - Literature
 - Training
 - Point of purchase displays

Distribution of T24 downlights since October 2005

- Lithonia Lighting has shipped approximately 45,000 T24 compliant downlights into CA since T24-2005 went into effect
- Over 6,000 unit inventory ready for immediate shipment from Lithonia Los Angeles distribution center
- Over 78% of the residential product being purchased is purchased at electrical distributors.
- All Home Depot stores in CA carry T24 compliant downlights – 195 stores in total.
- Home Centers serve less than 1/4 of the residential lighting purchases for downlights

AMERICAN SOCIETY OF HUMAN GENETICS
 11 DUANE STREET, SUITE 200
 CAMDEN, NJ 08102
 TEL: 609/291-2300
 FAX: 609/291-2301
 WWW.ASHG.ORG



Maximum wattage listed. Lower wattage lamps may be used. Unless noted, use specified lamps only. Lensed items are wet location listed. All others are damp location.

Premium Reflectors.—Flange rings are standard white, except as noted.

²⁴ Michael S. Spector, *Private Foreign Corrupt Practices: A History and a Prescription* (Cambridge, MA: Harvard University Press, 1999).

- Damping capabilities
- Sloped ceiling compatible

Free. What (SPEECH) and What (SPEECH) are comprised of the following only. See www.elsevier.com for more details.

- Lamp wattages
- Aperture sizes
- Trim styles
- Installation options

- Lamp wattages
- Aperture sizes
- Trim styles
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Sloped Ceiling Downlights

6" IC Housing

LI6F REC F

COMPACT FLUORESCENT

LITHONIA RESIDENTIAL RECESSED

IC Rated Full Trim - All trims are damp location listed. Listed trims are wet location listed. These IC trims also can be used in Non-IC applications using lamps and maximum wattage listed below. White flange standard.

Premium open trim, wide flange
601 White

Premium open trim, narrow flange
602 White
602SA Clear diffuse
602SB Clear specular
602SC Gold diffuse
602SD Gold specular

Premium baffle, wide flange
681 Black
681W White

Premium deep baffle, narrow flange
682 Black
682W White

Premium baffle, narrow flange
684 Black
684W White

Premium eyelid wallwash
6W1 White

Premium eyelid wallwash w/baffle
6W2 Black
6W2W White

Premium glass lens
6L01 Drop opal, white play
6L02 Drop opal, black baffle
6L03 Flush white, white play
6L04 Flush white, black baffle
6L05 Fresnel, white play
6L06 Fresnel, black baffle

Premium polycarbonate lens
6P01 Drop opal
6P02 Drop prismatic
6P03 Flush opal
6P04 Flush prismatic

Features
Pre-painted steel housing with galvanized steel J-box. Factory-installed, captive bar hangers span 24" and features built-in rollers and 1-bar clips. J-box has pole-hole connectors and built-in Barnes dumps. Socket clips to trim to ensure proper and consistent lamp position. 120V only electronic ballast standard (4-pin lamp) with end of life protection. Class P thermally protected against improper contact with insulation.

Listings
UL Listed to U.S. and Canadian safety standards. Approved for FCC grade B residential use.

Open sloped ceiling
6501 White

Baffled sloped ceiling
65B1 Black
65B1W White

Ordering Information

Example: **LI6F 26TRT 120 RECFADEZ**

Series: LI6F

Wattage/Lamps: 120TT/TRT 26TRT

Voltage: 120 REC F Residential-grade electronic ballast. Advance Mark10™ electronic dimming ballast. Minimum dimming level 5%.

Options: AT Sealed airtight housing to minimize air flow through housing. Complies with NEC and ASTM E263.

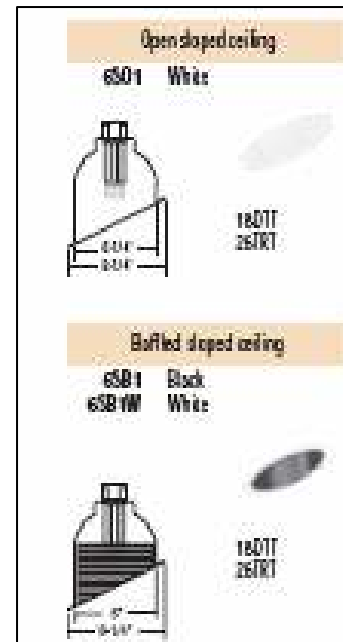
NOTES
1. For package, add suffix of housing number (Example: 6501FF).
APPROXIMATE For packaging information, see page 322. See specifications for complete trim selection.
Drawings are for dimensional data only. Actual configuration and dimensions are shown in inches.

www.lithonia.com, keyword: **LI6F REC F**

LITHONIA LIGHTING

317

- CFL IC/AT electronic ballast
- Lamp remains vertical for superior performance in sloped ceiling applications
- Stocked in CA distribution center



Attractive Designs

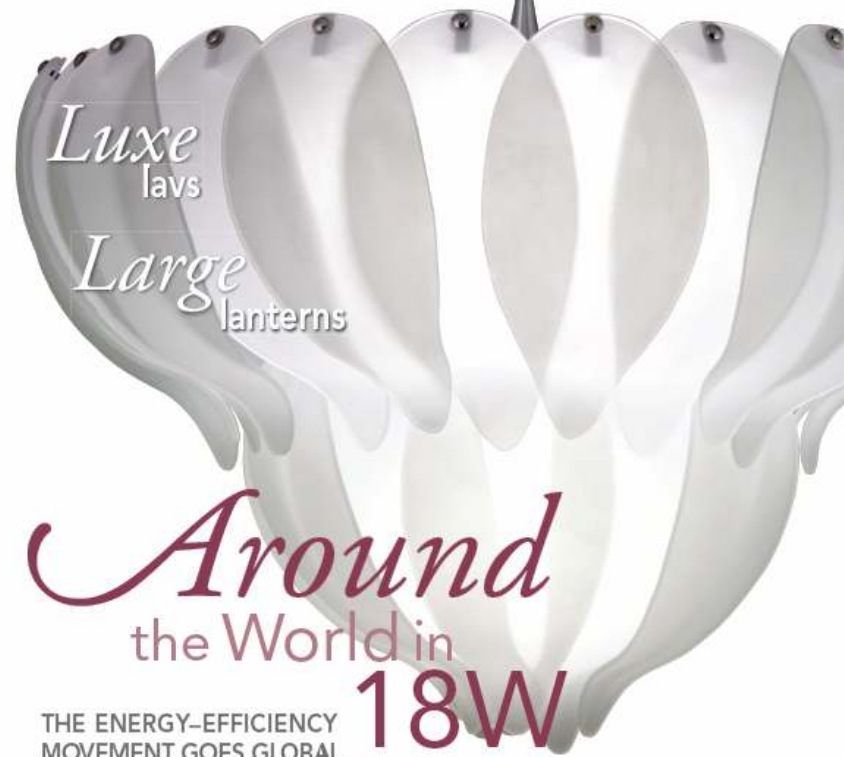
- www.lightahome.com



RESIDENTIAL LIGHTING

MARCH 2006

www.ResidentialLighting.com



1st Place Indoor Fixtures Family

FERROS™

LITHONIA LIGHTING™
LIGHT CONCEPTS

Energy-efficient and environmentally-conscious, our new high-design Ferros family is a Grand Prize Award Winner at the 2005 Lighting for Tomorrow National Lighting Fixture Design Competition. These transitionally styled fixtures are offered in either an antique bronze finish with tea-stained glass or a brushed-nickel finish with acid-etched, frosted glass. All fixtures are ENERGY STAR qualified.

<p>4-light Island (shown in Antique Bronze)</p>	<p>Pendant (shown in Antique Bronze)</p>	<p>5-light Chandelier (shown in Brushed Nickel)</p>	<p>9-light Chandelier (shown in Antique Bronze)</p>
<p>Mini-pendant (shown in Brushed Nickel)</p>	<p>Sconce (shown in Antique Bronze)</p>	<p>2-light Vanity (shown in Brushed Nickel)</p>	<p>3-light Vanity (shown in Antique Bronze)</p>
			<p>4-light Vanity (shown in Brushed Nickel)</p>

Identifying T24 Compliant Lighting

- Catalog sheets clearly identify Energy Star products



Catalog Number

Notes

Type

6" Housing

L7XF

RECF

Residential
FLUORESCENT
IC/Non-IC
New Construction

Specifications

Height: 7-3/8" (18.7)
Length: 14-15/16" (37.9)
Width: 13-7/8" (35.1)

All dimensions are inches (millimeters).

FEATURES & SPECIFICATIONS

INTENDED USE

Excessed housing rated IC and Non-IC. For new construction only.
Approved for all ceiling and wiring types. California Title 24 compliant.
Approved for direct burial in insulation.

CONSTRUCTION

Air-Tight standard.
Tested to meet energy codes:
MEC, WSEC, IECC, Performance
Tested and Certified per ASTM E633
Galvanized steel pan with aluminum housing.
Galvanized bar hangers span up to 24" o.c. and feature built-in roller and T-bar clips.
Locking screw holds fixture in position.
Galvanized steel junction box with four built-in Romex clamps; five 3/4" and two 1/2" knockouts with slots for prying.
Rated for 90°C supply wire.
Ground wire provided.
Removable J-box doors for easy access.
Ballast housing (12W only) designed to promote cooler ballast operation.

ELECTRICAL SYSTEM

Electronic 120 volt ballast with end of life protection.
Class F thermally protected ballast protects against improper contact with insulation.
PHC (poke home connectors) standard.
Socket assembly clips to top of housing to prevent panic overspray.
Socket attaches to reflector to ensure proper and consistent lamp position.

INSTALLATION

2 x 4 wood joist or T-bar installation.
Expandable bar hangers allow for off-center mounting in wood joist or T-bar ceiling.
Length of 20N" max., 12N" min. or cut to fit 6" on center joist construction.
Vertical adjustment of housing allows for flush mounting with ceiling face.
Ceiling cutout 7".

LISTING

UL Listed to U.S. and Canadian safety standards.
Damp location listed. (See this selection for wet location listing.)
Approved for FCC grade B residential use.

ORDERING INFORMATION

Choose the boldface catalog number(s) that best suits your needs and write it on the appropriate line. Order accessories as separate catalog number.

Example: L7XF-2xDT/RT 120 RECF

L7XF

Series

L7XF

Lamps

1xDT/RT
1xDT/RT
2x/RT

Volt

120 RECF

Options

GMF Single slow-blow fuse.
WLP 20K Lamp (shipped separately)

Accessories

Order as separate catalog number

LMND T-bar mounting clips, set of four

Downlighting and Track

Sheet #: L7XF-RECF

RCFL-120

Identifying Product at Home Centers





T24 identifier is on:

- Display
- Shelf
- Packaging

Summary

- During the 2005 standards development, CEC made a case that residential energy use was critical to CA energy efficiency and demand management.
- CA cannot afford to progress backwards with energy standards
- Industry has responded with quality product solutions that have excellent performance and reliability.
- Manufacturers have invested significant cost and time in developing compliant products, marketing communications, point of purchase displays and training.
- Manufacturers and retailers cannot afford the stranded costs (and lost time) required to support new energy standards, when there is a question about whether they will be supported by the Energy Commission.
- CEC must maintain the requirement for 50% of lighting power in kitchens to be high efficacy systems